CLAIMS

1. A method for carrying out a reaction by utilizing a micro flow channel characterized in that, in carrying out a chemical reaction of two kinds or more of reactants capable of reacting each with the others, molecules of the reactants as carried by a fluid are introduced into a micro flow channel and the chemical reaction is carried out efficiently by utilizing interactions of the micro flow channel to cause changes in the molecular structure, molecular orientation or distribution of the molecules in the solution.

2. The method for carrying out a reaction by utilizing a micro flow channel described in Claim 1 in which two kinds or more of the reactants are mixed together in advance and which is carried out under introducing of the fluid carrying the same.

3. The method for carrying out a reaction by utilizing a micro flow channel described in Claim 1 or 2 in which fluids each individually carrying the molecules of two kinds or more of the reactants are concurrently passed through the micro flow channel so as to form laminar flows of both and to carry out the chemical reaction on the interface therebetween.

4. The method for carrying out a reaction by utilizing a micro flow channel described in either one of Claims 1 to 3 in which a fluid carrying molecules of one kind or more of the reactants is passed through the micro flow channel and the chemical reaction is carried out with molecules of a different reactant immobilized onto the wall surfaces of the flow channel.

5. The method for carrying out a reaction by utilizing a micro flow channel described in either one of Claims 1 to 4 which is carried out by utilizing the performance of the micro flow channel by which molecules of a compound having a long chain-formed or branched structure in an entangled condition by condensing in a solution are stretched into a straightly elongated condition.

6. The method for carrying out a reaction by utilizing a micro flow channel described in either one of Claims 1 to 4 which is carried out by utilizing the performance of the micro flow channel by which molecules of the compound

dispersed in a random condition within the solution are brought into an oriented condition.

7. The method for carrying out a reaction by utilizing a micro flow channel described in either one of Claims 1 to 4 which is carried out by utilizing the performance of the micro flow channel by which, during passage of the solution through the micro flow channel, molecules of the reactants uniformly distributed in the solution become gathered to the core portion or to the vicinity of the wall surfaces of the flow channel.